

November 2, 2018

-Docket No. 2018-321-E-

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The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
The Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, SC 29210

RE: Greenlots' Comments in Support of Duke's Proposed Transportation Electrification Pilot

Dear Ms. Boyd,

Greenlots submits these comments to the Public Service Commission of South Carolina ("the Commission") in support of Duke Energy Progress, LLC's and Duke Energy Carolinas, LLC's (collectively, "the Company" or "Duke") proposed Transportation Electrification Program ("the program") filed in Docket No. 2018-321-E and Docket No. 2018-322-E on October 10, 2018.

Greenlots is a leading provider of electric vehicle ("EV") charging software and services committed to accelerating transportation electrification in South Carolina. The Greenlots network supports a significant percentage of the DC fast charging infrastructure in North America, and an increasing percentage of the Level 2 infrastructure. Greenlots' smart charging solutions are built around an open standards-based focus on future-proofing while helping site hosts, utilities, and grid operators manage dynamic EV charging loads and respond to local and system conditions.

Transportation electrification stands to bring a host of benefits to South Carolina and society at large. These include economic development and cost savings, environmental, human health, energy security, and grid resiliency benefits. In fact, if one looks only at the cost savings benefits from reduced electric bills and reduced vehicle operating costs, by 2050 South Carolina will realize cumulative net benefits from transportation electrification that will exceed \$2.7 billion state-wide under a moderate EV adoption trajectory assumed by the U.S. Energy Information Administration.¹ This figure increases to \$24 billion under an EV adoption trajectory that reduces light-duty greenhouse gas emissions by 70-80% from 2018 levels by 2050.²

These figures help illustrate that transportation electrification represents likely the single greatest opportunity to increase the utilization of the electric grid to the benefit of all ratepayers. These benefits will not happen automatically, however, and will require thoughtful and

¹ MJB&A, "Plug-in Electric Vehicle Cost-Benefit Analysis: South Carolina", June 2018, p. ii-iii. Available at: <https://mjbradley.com/sites/default/files/SC%20PEV%20CB%20Analysis%20FINAL.pdf>

² I.d.

November 2, 2018

Greenlots' Comments in Support of Duke's Proposed Transportation Electrification Pilot

Docket No. 2018-321-E & 2018-322-E

Page 2

deliberate planning and programs to realize, especially if the state wishes to maximize the value presented by this opportunity. Duke's interest in addressing significant barriers to widespread transportation electrification in South Carolina, including a lack of accessible charging infrastructure, a lack of consumer awareness, and high upfront infrastructure costs, is therefore both appropriate and necessary.

Duke's proposed pilot programs represent a portfolio of modest targeted offerings to gain learnings to accelerate transportation electrification that leverages the Company's core competences and ability to help support and accelerate the market to the benefit of all utility customers. The programs are effectively designed to support consumers in realizing the benefits of EVs, efficiently integrate EV loads into the grid, and reduce persistent barriers to EV adoption.

The proposed Residential EV Charging Program both incentivizes the installation of smart, networked EV chargers to support EV drivers while providing for better integration of electric vehicle charging loads into the grid through utility management of home charging during defined hours. This will result in environmental benefits, economic benefits and grid utilization benefits that can ultimately benefit all ratepayers while accelerating the market.

In providing financial support for the purchase of up to 30 electric school buses and 30 electric transit buses, the EV School Bus Charging Station Program and the EV Transit Bus Charging Station Program will help address equitable access to electric transportation and bring the benefits electric transportation to the state's schoolchildren. Additionally, the EV school bus program will evaluate the charging characteristics and usage patterns of electric school buses and test bidirectional power flow abilities of and the potential to use their batteries during times of high electric demand or during disaster recovery to the benefit of the grid.

Finally, and importantly, the DC Fast Charging Station Program will develop a critical, beginning level of public fast charging infrastructure throughout the state, installing up to 30 public DC fast chargers and addressing one of the most significant barriers to electric vehicle adoption and beginning to fill critical market gaps being left by the private sector. Indeed, the current lack of such public charging infrastructure can be described as a market failure. This proposed program will take essential steps towards accelerating this market, supporting EV drivers and consumer EV purchase decisions, while also providing critically undervalued maintenance and reliability benefits to this infrastructure via Duke's stewardship and operation.

For these reasons, Greenlots supports and respectfully requests that the Commission approve Duke's proposed pilot programs. We look forward to continued engagement in efforts supporting transportation electrification in South Carolina, and we thank the Commission for consideration of these comments.


Respectfully submitted,

November 2, 2018

Greenlots' Comments in Support of Duke's Proposed Transportation Electrification Pilot

Docket No. 2018-321-E & 2018-322-E

Page 3

A handwritten signature in black ink, appearing to read 'T. Ashiey', with a stylized, wavy line extending from the end.

Thomas Ashiey

VP, Policy